

FIG. 1

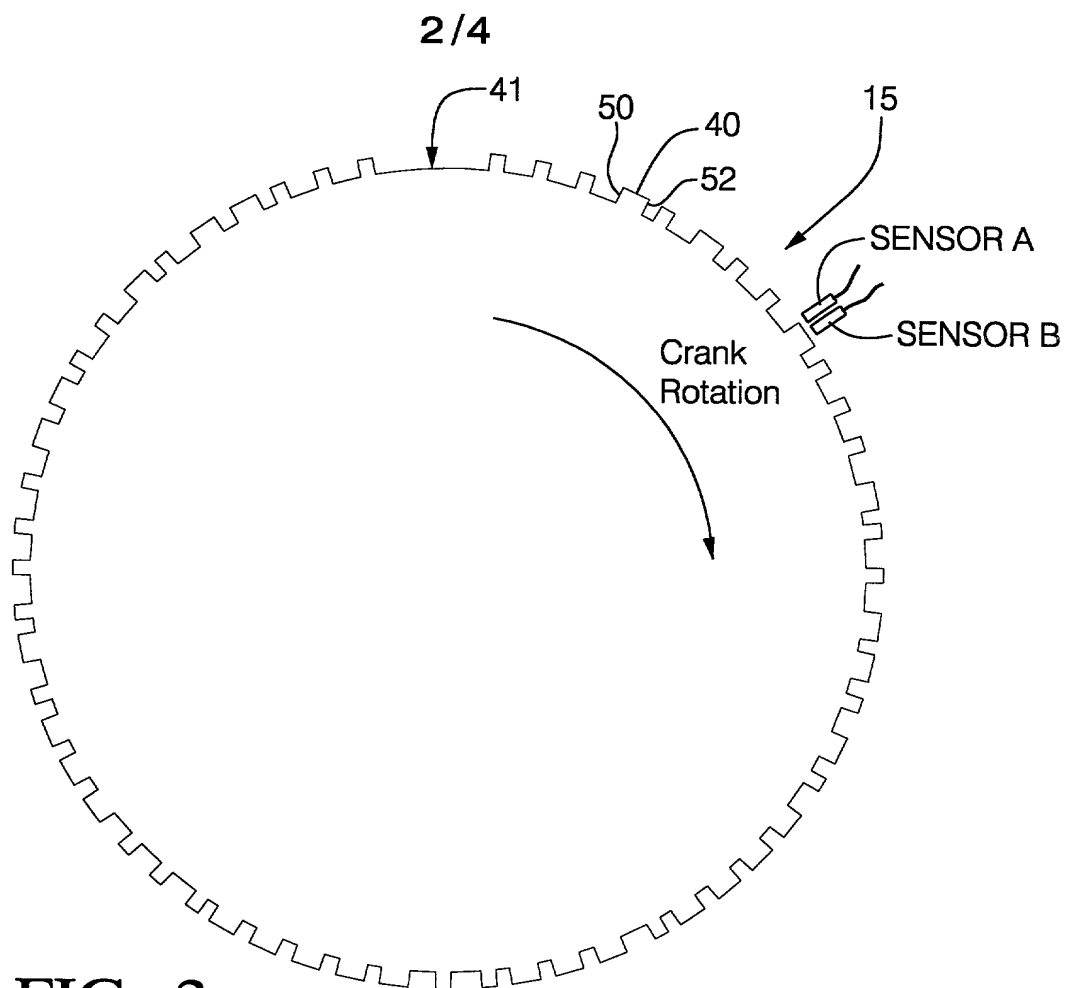


FIG. 2

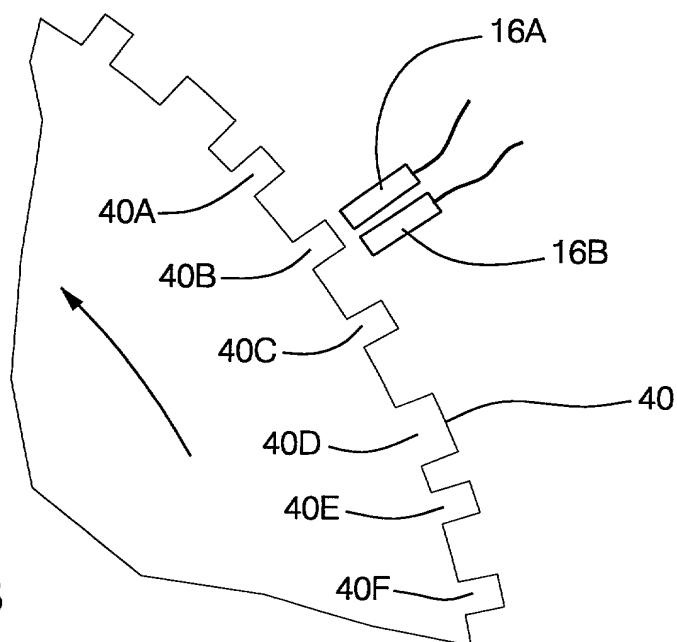


FIG. 3

FIG. 2

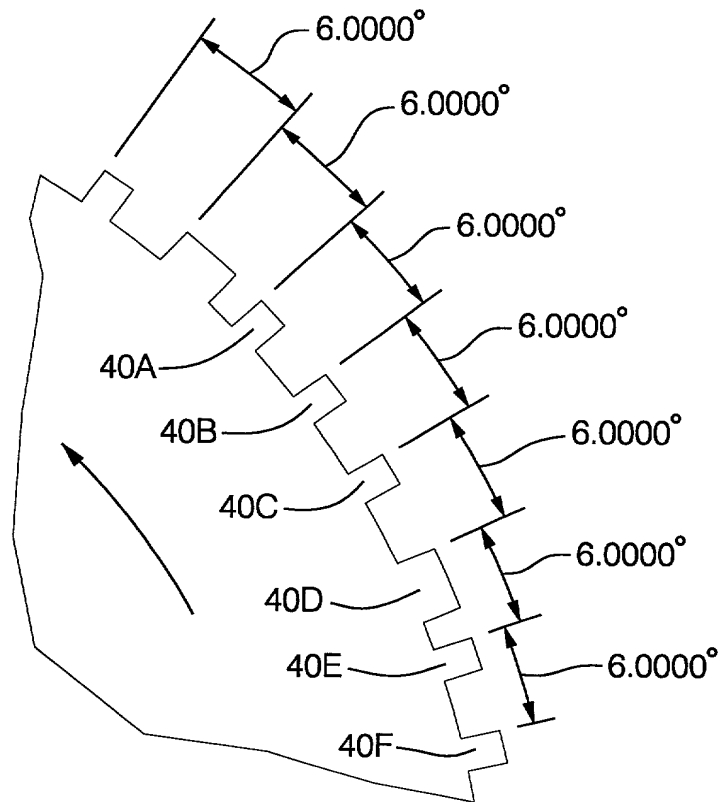


FIG. 4



FIG. 6

TOE000" 8472660

| Index | Pattern | CKP Tooth | Index | Pattern | CKP Tooth | Index | Pattern | CKP Tooth | Index | Pattern | CKP Tooth |
|-------|---------|-----------|-------|---------|-----------|-------|---------|-----------|-------|---------|-----------|
| 0 | 000000 | 3 | 16 | 010000 | 1 | 32 | 100000 | 2 | 48 | 110000 | 15 |
| 1 | 000001 | 4 | 17 | 010001 | 50 | 33 | 100001 | 16 | 49 | 110001 | 24 |
| 2 | 000010 | 17 | 18 | 010010 | 54 | 34 | 100010 | 51 | 50 | 110010 | 47 |
| 3 | 000011 | 5 | 19 | 010011 | 11 | 35 | 100011 | 25 | 51 | 110011 | 32 |
| 4 | 000100 | 52 | 20 | 010100 | 57 | 36 | 100100 | 48 | 52 | 110100 | 9 |
| 5 | 000101 | 18 | 21 | 010101 | xx | 37 | 100101 | 55 | 53 | 110101 | 42 |
| 6 | 000110 | 6 | 22 | 010110 | 44 | 38 | 100110 | 12 | 54 | 110110 | xx |
| 7 | 000111 | 26 | 23 | 010111 | 20 | 39 | 100111 | 33 | 55 | 110111 | 37 |
| 8 | 001000 | 49 | 24 | 011000 | 14 | 40 | 101000 | 58 | 56 | 111000 | 23 |
| 9 | 001001 | 53 | 25 | 011001 | 46 | 41 | 101001 | 10 | 57 | 111001 | 31 |
| 10 | 001010 | 56 | 26 | 011010 | 8 | 42 | 101010 | xx | 58 | 111010 | 41 |
| 11 | 001011 | 19 | 27 | 011011 | xx | 43 | 101011 | 43 | 59 | 111011 | 36 |
| 12 | 001100 | 13 | 28 | 011100 | 22 | 44 | 101100 | 45 | 60 | 111100 | 30 |
| 13 | 001101 | 7 | 29 | 011101 | 35 | 45 | 101101 | xx | 61 | 111101 | 40 |
| 14 | 001110 | 34 | 30 | 011101 | 39 | 46 | 101110 | 21 | 62 | 111110 | 29 |
| 15 | 001111 | 27 | 31 | 011111 | 28 | 47 | 101111 | 38 | 63 | 111111 | xx |

Note: "xx" indicates invalid state.

FIG. 5

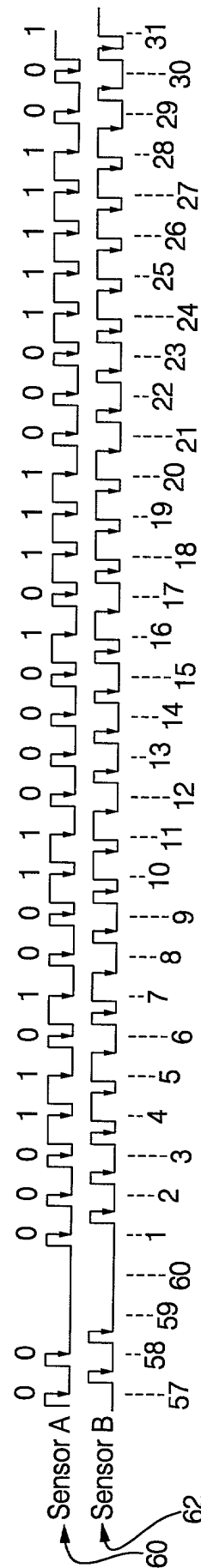


FIG. 7